

PEDIATRICS

UNDER THE CHARGE OF

THOMPSON S. WESTCOTT, M.D., AND FREDERICK O. WAAGE, M.D.,
OF PHILADELPHIA.

Etiological Relationship of Syphilis to Chorea of Sydenham.—KOPLIK (*Arch. Pediat.*, 1915, xxxii, 561) reports his investigation of cases of Sydenham's chorea with a view to proving an etiological relationship with syphilis. He avers the clinical connection between chorea and endocarditis and between chorea and rheumatic joint manifestations and states it as his belief that all chorea of the Sydenham type seems to be of an infectious nature. By investigating 11 cases of chorea he found no positive Wassermann reaction and no clinical or physical evidence of syphilis. By intravenous injection of salvarsan in 7 cases of chorea there was no especial improvement and certainly no "striking effect" has had been averred. He does not believe there is any connection between the two diseases and from the results of his investigation he concludes that salvarsan has no more value in chorea than what has hitherto been used in treating this disease.

Congenital Syphilis in Infants.—M. SOLDIN and F. LESSER (*Deutsch. med. Wochenschr.*, 1915, xli, 429) present the symptom-complex of a number of cases which have merely a suggestion of syphilitic disease and in which the Wassermann reaction was uniformly negative. The infants suffered primarily from nutritional disorders. Symptoms which suggested congenital syphilis in these cases were sniffling, discrete rose-colored macules on the soles of the feet showing no infiltration, post-cervical lymphatic enlargement only as large as rice kernels, and occasionally a slight and temporary enlargement of the liver and spleen. In every one of these cases the mother was found to have a positive Wassermann reaction and so turned a suspicion of the disease due to a faint symptom, to a conviction of the presence of a luetic taint. Toxic substances may have been transmitted to the child from its syphilitic mother sufficient to account for the suggestive symptom and yet the question may arise if the child be actually a spirochete carrier. Again all syphilitic symptoms of an active kind can be absent for many years and then suddenly develop. Systematic observation in families afflicted with congenital syphilis show that in one-half the cases congenital syphilis is latent during the early years. For practical purposes the authors lay down the rule, not to be content with a negative Wassermann reaction in an infant with suggestive luetic signs but to also examine the blood of its mother.

Treatment of Scarlet Fever.—R. KOCH (*Deutsch. med. Wochenschr.*, 1915, xli, 372) compares the scarlet fever statistics of Barasch with his own and draws conclusions as to specific treatment in this disease. In ten years Barasch reports 1438 cases of scarlet fever with a mortality of

15 per cent., only 6.6 per cent. of deaths occurring after the third day. Koch reports 263 cases in one year with a total of three deaths, or 1.1 per cent. In Barasch's cases no specific treatment was carried to a definite conclusion, the treatment being general. In Koch's cases 28 of the most severe cases were treated by intravenous injection of "convalescent serum," taken from patients convalescent from scarlet fever. Of the 28 cases but 1 died. Of 12 cases, not quite as severe which were treated with normal human serum, 1 died. Koch remarks the difference in the two mortality records and implies that the small percentage in his cases is due to the employment of the serum. In Barasch's cases 122 out of 217 cases died during the first three days through general intoxication. It is in the very grave cases that the "convalescent serum" has its greatest effect when given early and in sufficiently large doses, 50 c.c. for small children and 100 c.c. for older cases. The serum has little if any effect when used in cases with complications of scarlet fever. The serum should be gathered from a number of convalescent cases and mixed. It is sterilized and combined with 0.5 per cent. of a 4 per cent. carbolic acid solution.

Localizing Brain Symptoms as Early Events in Tuberculous Meningitis.—C. O. HAWTHORNE (*British Jour. Child. Dis.*, 1915, xii, 232) reports 2 cases of tuberculous meningitis which began during apparent good health with motor phenomena suggestive of a localized cerebral lesion. One child vomited and the following day was found to have a paralysis of the left face and left arm which cleared up in forty-eight hours, to be followed a day later by convulsive seizures of these parts, following which paralysis was again noted but other clinical signs absent, including the fundus of the eye and the spinal fluid. The paralysis disappeared entirely later on only to usher in the frank signs of tuberculosis meningitis. The other child was suddenly seized with right-sided convulsions which ceased in several hours and next day there were no clinical signs of disease to be found. Within three days convulsive seizures again appeared and he later developed a tubercular meningitis which was proven at autopsy. Convulsions and paresis usually come late in this disease and to explain the early symptoms mentioned in the above 2 cases, the author suggests that the sudden and limited motor phenomena marked the arrival of the specific irritant within the cranial cavity and its application to a localized area of brain tissue. Presumably, the effect of such emboli on the motor cortex would be capable of producing cortical disturbances which express themselves clinically either as unilateral paresis or unilateral convulsion followed after a time by local recovery of nerve function and still later by generalized signs of a meningitis from an extending infection. It does not seem possible to carry the position further than to say that at times the arrival of the infection in this disease may be marked by limited motor phenomena suggestive of a localized cerebral lesion.

Immunization against Measles.—C. HERMANN (*Arch. Pediat.*, 1915, xxii, 503) reports a series of tests in immunizing infants against measles. The basis for his idea is that infants under five months are relatively immune to measles or when they are infected the disease appears in a

mild typical form. Under two months infants are absolutely immune. The immunity becomes less marked toward the end of the first year and during the second year is entirely absent. Infants under five months coming in intimate contact with measles without being infected frequently do not contract the disease when exposed later. One attack of measles usually protects for life. Also the immunity cannot be transferred by the mother solely through the breast milk for artificially fed infants are also immune. The infant possibly elaborates its own antibodies. Also the nasal discharge contains the virus twenty-four hours before the appearance of the eruption in measles. Based on these facts the theory is to inoculate infants under five months with measles virus, thereby conferring an immunity by manufacturing antibodies while the child is least susceptible or at most will take the disease in a mild atypical form. Up to this time 40 infants have been inoculated at the following ages: 1 at two and a half months; 4 at three months; 3 at three and a half months; 6 at four months; 15 at four and one half months, and 11 at five months. The majority of the infants showed no distinct reaction. Fifteen had a slight rise of temperature from the eighth to the fourteenth day and in a few instances a few indistinct spots were noticed. Of these cases, 4 over one year of age have since come in intimate contact with measles and have not contracted the disease and in addition, 2 of the 40 cases were re inoculated at the age of twenty-one and twenty-three months respectively, the result being negative in both. Material for inoculation consists of mucus from the nose of otherwise healthy children taken twenty-four hours before the measles eruption appeared. It was taken on small cotton swabs and kept in glass vials containing a moist piece of blotting paper at the bottom. The inoculations were made by applying the swab gently to the nasal mucous membrane. It would be desirable to devise some method by which the infectious material could be made to retain its virulence for more than twenty-four hours.

Erysipelas Treated with Whole Blood from Convalescent Patient.—A. D. KAISER (*Arch. Pediat.*, 1915, xxxii, 519) reports a case of erysipelas in a girl, aged six years, which resisted all usual remedies including antistreptococcal serum. The areas involved were the entire left arm, the chest and upper abdomen, and the streptococci were obtained in culture. Seven ounces of blood were taken from an adult case convalescing from erysipelas and injected, after titration by Zingher's method, into seven different muscles of the child's body. The child's temperature dropped to 100° in twelve hours and to normal within twenty-four hours, accompanied by a disappearance of the redness, swelling and tenderness and a marked general improvement which was rapid and uninterrupted. The adult convalescent's temperature had been normal for five days and the streptococcus had also been grown in culture from the lesions. The protective bodies in the blood of the convalescent apparently acted with success and this method is urged in severe cases where the outcome looks dubious if a suitable donor can be obtained.